Listing of Claims:

1. (original) A method for producing Permian super fuel comprising:
   (a) introducing a hydrocarbon into a reactor vessel;
   (b) introducing an acid into the reactor vessel;
   (c) introducing an oxide into the reactor vessel;
   (d) introducing a metal hydride compound into the reactor vessel; said metal hydride compound prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride;
   (e) circulating the mixture in the reactor vessel;
   (f) recovering Permian super fuel.

2. (original) The method according to claim 1 wherein the hydrocarbon is selected from the group consisting of gasoline, diesel, fuel, fuel oil, kerosene, and jet fuel.

3. (original) The method according to claim 1 wherein the metal hydride compound is $Na_{8.2}Si_{4.4}H_{9.7}O_{17.6}$.

4. (original) The method according to claim 1 wherein the acid is selected from the group consisting of hydrochloric acid, hydrobromic acid, and mixtures thereof.

5. (original) The method according to claim 1 wherein the meal oxide is selected from the group consisting of chromic oxide, nickel oxide, aluminum oxide, magnesium oxide, manganese oxide, and mixtures thereof.

6. (original) The method according to claim 1 wherein the reaction is conducted at temperatures ranging from about 0 to about 200°F.

7. (original) The method according to claim 1 wherein the reaction is conducted at pressures ranging from about ambient to about 100 psi.

8. (original) The method according to claim 1 wherein the hydrocarbon is present in amounts ranging from about 85 to about 96% by weight, the acid is present in amounts ranging from about 1 to about 5% by weight, the metal oxide is present in amounts ranging from about 0.1 to about 1% by weight, and the metal hydride compound is present in amounts ranging from about 1 to about 5% by weight.

9. (withdrawn) A method for refining hydrocarbons comprising contacting hydrocarbons with a mixture of an acid, a metal oxide, and a metal hydride compound at pressures ranging from about ambient to about 25 psi and recovering refined hydrocarbons, wherein said metal hydride compound is prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride

10. (withdrawn) The method according to claim 9 wherein said metal hydride compound is $Na_{8.2}Si_{4.4}H_{9.7}O_{17.6}$.

11. (withdrawn) A method for polymerizing hydrocarbons comparing contacting hydrocarbons with a mixture of an acid, a metal oxide, and a metal hydride compound at pressures ranging from about ambient to about 25 psi and a temperature ranging from about 80 to about 150°F, and recovering a polymerized hydrocarbon, wherein said metal hydride compound is prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride

12. (withdrawn) The method according to claim 11 wherein said metal hydride compound is $Na_{8.2}Si_{4.4}H_{9.7}O_{17.6}$.

13. (withdrawn) A method for hydrogenating hydrocarbons comparing contacting hydrocarbons with a mixture of an acid, a metal oxide, and a metal hydride compound at pressures ranging from about ambient to about 25 psi and a temperature ranging from about 80 to about 150°F, and recovering a hydrogenated hydrocarbon, wherein said metal hydride compound is prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular

weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride.

14. (withdrawn) A method for cleaning contaminated soils comprising contacting contaminated soil with an aqueous solution of a metal hydride compound to release petroleum products from the contaminated soil and removing the mixture of petroleum products and aqueous solution of a metal hydride compound from the soil, wherein the metal hydride compound is prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride.

15. (withdrawn) The method according to claim 14 wherein the metal hydride compound is $Na_{8.2}Si_{4.4}H_{9.7}O_{17.6}$.

16. (withdrawn) A method for enhancing recovery of oil from oil wells comprising accelerating an aqueous solution of a metal hydride compound through a restricted area in an oil well to create a cavitation effect, wherein said metal hydride compound is prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride.

17. (withdrawn) The method according to claim 16 wherein the metal hydride compound is $Na_{8.2}Si_{4.4}H_{9.7}O_{17.6}$.

18. (withdrawn) A method for cleaning surfaces comprising contacting said surface with an aqueous solution of a metal hydride compound, wherein said metal hydride compound is prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride.

19. (withdrawn) The method according to claim 18 wherein the metal hydride compound is $Na_{8.2}Si_{4.4}H_{9.7}O_{17.6}$.

20. (withdrawn) The method according to claim 18 wherein the surface is a tank bottom.

21. (withdrawn) A method for treating sour gas comprising treating sour gas with an aqueous solution of a metal hydride compound, wherein said metal hydride compound is prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride.

22. (withdrawn) The method according to claim 21 wherein the metal hydride compound is $Na_{8.2}Si_{4.4}H_{9.7}O_{17.6}$.

23. (withdrawn) A method for extracting edible or essential oils from plant materials comprising mixing a plant material containing edible or essential oil with an aqueous solution of a metal hydride compound and pressing the plant material to extract the edible or essential oils therefrom, wherein the metal hydride compound is prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride.

24. (withdrawn) The method according to claim 23 wherein the metal hydride compound is $Na_{8.2}Si_{4.4}H_{9.7}O_{17.6}$.

25. (withdrawn) A method for neutralizing odors comprising contacting the source of said odor with an aqueous solution of of a metal hydride compound, wherein the metal hydride compound is prepared by mixing together from about 1 to about 10 parts by molecular weight of at least one metal selected from the group consisting of silicon, aluminum, tin, and zinc; from about 1 to about 3 parts by molecular weight of an alkali metal hydroxide; and from about 5 to about 10 parts by molecular weight of water and allowing this mixture to stand for a time sufficient to form a metal hydride.

26. (withdrawn) The method according to claim 25 wherein the metal hydride compound is $Na_{8.2}Si_{4.4}H_{9.7}O_{17.6}$.